



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

MAR 27 2013

REPLY TO THE ATTENTION OF:

Don Faith III
Air Management Engineer
Bureau of Air Management
Wisconsin Department of Natural Resources
PO Box 7921
Madison, Wisconsin 53707-7921

RE: Comments on Proposed New Source Review Permits for Calumet Superior

Dear Mr. Faith,

The U.S. Environmental Protection Agency has reviewed the proposed New Source Review permits, permit numbers 12-DCF-226 and 12-DCF-257, for Calumet Superior, LLC in Superior, Wisconsin (Calumet Superior). To ensure that the source meets Clean Air Act requirements, that the permits will provide necessary information so that the basis of the permit decision is transparent and readily accessible to the public, and that the permit record provides adequate support for the decision, EPA has the following comments:

1. Calumet Superior has applied for 8 minor construction permits in 9 months, 5 of which are scheduled during the 2013 "turn around". EPA is concerned that many of these processes would benefit from, or are related to, a possible change in crude slate at the facility. We have asked Calumet Superior to provide additional information to better assess whether or not prevention of significant deterioration should apply in this instance. Once we have this information and can make the determination, we will contact the Wisconsin Department of Natural Resources (WDNR).
2. In permit 12-DCF-226, pg 26, I.M.6.b.(5) lists the limitation of I.M.6.a.(3)(b) with the a different averaging time from that section and could more clearly define what values from I.M.6.a are excess emissions.
3. In permit 12-DCF-226 starting on page 4 and in multiple places afterwards there are compliance demonstrations for Continuous Emissions Monitors (CEM) worded "The permittee shall comply with the CEM quality control and quality assurance plans submitted to and approved, in writing, by the Department." Are these plans approved and effective? If not, when are they expected to be approved?
4. Permit 12-DCF-226 page 21, I.M.3.c does not appear to have a record-keeping requirement related to I.M.3.b.(2). What records will be used to show the facility is meeting the compliance demonstration in I.M.3.b.(2)?

5. Permit 12-DCF-226 pg 26 I.M.6.b.(3) states "The facility shall make CEMs data available to EPA and WDNR upon request." Compliance demonstrations for other required CEMs do not have this requirement. We recommend adding this requirement to the other CEMs at the facility.

We appreciate the opportunity to provide comments on this draft permit. Enclosed is a summary of the comments discussed with Don Faith III on March 14th and 19th, 2013. If you have any questions, please contact me or contact Jesse McGrath, of my staff, at (312) 886-1532.

Sincerely,

A handwritten signature in cursive script, appearing to read "Genevieve Damico".

Genevieve Damico
Chief
Air Permits Section

Enclosure

Summary of Responses to Questions Asked by Jesse McGrath in two Phone Conversations with Don Faith III on March 14th, and 19th, 2013

Permit 12-DCF-226 pg 7 I.M.1.b.7 NOTE – Why is there an upper limit of 300 lbs SO₂/hr when substituting data?

This process can't realistically emit 300 lbs SO₂/hour so that prevents unrealistic substitution. The facility was having issues with CEM downtime so this limit established the upper limit in the event that the CEM was down. With this upper limit, missing CEMs data would prevent a violation of hourly limits, but would not necessarily prevent violations of the monthly limits.

Permit 12-DCF-226 pg 9 I.M.1.b.11– Should “See I.M.1.c.(10)” be “See I.M.1.c.(8)”?
Yes.

Permit 12-DCF-226 pg 10 I.M.2.a.(3)(a) – Is this limit supposed to be identical to I.M.2.a.(1)
No, I.M.2.a.(1) has no averaging time associated with the limit, I.M.2.a.(3)(a) has a 3-hour averaging time.

Permit 12-DCF-226 pg 11 I.M.2.b.(5)(c) – Why is there an optional, more stringent, limitation here?

The facility requested this because the existing requirement could allow for instances where the facility was in compliance, but unable to demonstrate so. This limitation may be more stringent, but is more accurate.

Permit 12-DCF-226 pg 25 – You appear to be removing a BACT requirement here, but BACT requirements are generally kept in permits even if there is a more stringent limitation.
This is a state BACT and that requirement only applies to federal BACTs.

Permit 12-DCF-257 page 3 I.M.2.a.(1) – Is the change from 0.61 lbs SO₂/hr to 0.95 lbs SO₂/hr a relaxation?

No, the original value was incorrectly calculated using the lower heating value of the gas. This is calculated with the higher heating value.

Permit 12-DCF-257 page 9 I.M.8.b.(4)(f) says to sum ‘the numbers derived under conds. (a)-(e). It looks like (4)(e) is the baseline actual. Should (4)(f) say “sum (a)-(d) and subtract (e)”?
Under (e) it does say to ‘deduct’ the BAE from the actual emissions [in the future, also from (e)], so I believe that the summation under (f) is correct.

Permit 12-DCF-257 page 4 section I.M.5.b.(1) “The permittee may only burn refinery fuel gas...” to show compliance with the NO_x limit. How does this demonstrate compliance?

They're relying upon use of a natural-gas-like fuel (refinery gas) and its characteristics for the burner to have this level of emissions. Refinery gas is mainly methane and hydrogen and perhaps some propane and similar materials. Its BTU content can be as low as 600 BTU/scf [with lots of hydrogen present] to over 1000 BTU/scf.